

## REMARKS

With the entry of this Amendment, claims 1-8 will be pending in this patent application.

### OBJECTION TO THE SPECIFICATION

The Examiner's objection to the specification as not stating the claimed priority data seems to be in error. The claimed priority data was added as an amendment to the specification on page 2 of the transmittal for the filing of this application on July 9, 2003.

### OBJECTION TO ABSTRACT

In the amended Abstract attached as the last page of this paper, the text of the original Abstract is presented in a single paragraph. Applicant trusts that the objection to the Abstract, as stated in the outstanding Office Action, has been obviated by the amendments to the Abstract.

### OBJECTIONS TO CLAIM

In the amendments to the claims made in this paper, Applicant has taken care to eliminate the language that the Examiner found objectionable. Applicant therefore trusts that the objections to the claim stated in the outstanding Office Action have been obviated by the amendments to the claims as presented herein.

### PRIOR ART REJECTION

Claims 1-7 were rejected under 35 USC § 102(e) as being anticipated by US 6430993 B1 (Seta). Applicant respectfully traverses this rejection insofar as it might be deemed applicable to any of claims 1-8 as now presented.

By the novel method disclosed and claimed in this application a simulation of tire performance on a snowy road surface can be used to evaluate the performance of tires running in snow and thereby facilitate the development of tires at modest cost compared to methods of the prior art. In particular the disclosed and claimed method makes use of a model of snow which comes in contact with a model of a tire, and in which the snow of the model undergoes deformation, i.e., a decrease in volume and an increase in density in response to compressive forces resulting from contact between the tire model and the snow model.



Without acquiescing in the rejection, Applicant has amended claim 1 to recite the snow model made as part of the claimed method as made up of numerically analyzable elements being capable of presenting its volume change *and mass density change* caused by compression and being capable of maintaining a volume change *and a mass density change* after the compression is removed. Claim 1 has also been amended to clearly specify that the steps of "setting of conditions," "computing of deformation of the tire model" and "computing of deformation of the snow model" are repeatedly carried out at minute time intervals to obtain data that is outputted. New claim 8 recites the snow model as having "a voluminal hysteresis" and, like claim 1, also specifies that the steps of "setting of conditions," "computing of deformation of the tire model" and "computing of deformation of the snow model" are repeatedly carried out at minute time intervals to obtain data that is outputted. Support for the amendments to claim 1 and for the subject matter recited in claim 8 can be found, for example, on page 2, lines 9-15, and on page 9, line 21, through page 10, line 22, in the specification of this application as filed.

Seta discloses a method of assessing tire performance that makes use of a "fluid model" in which the *flow properties* of the fluid model in contact with a tire model are used to evaluate the tire performance. Some of the fluid models make use of the coefficient of friction imparted to a road surface by snow or ice having flow properties. According to one scheme, for example, snow is treated as a kind of snow-water slush. None of the schemes for a fluid model disclosed by Seta treat snow as a substance that undergoes deformation that produces changes in volume and density of the simulated snow. None of the schemes disclosed by Seta simulate the state of snow that is gradually trodden down by the tire. Accordingly, the schemes disclosed by Seta are fundamentally different from the method disclosed in this application and cannot meet the requirements that are clearly stated in independent claims 1 and 8.

In view of the observations presented above, Applicant submits that claims 1 and 8 should be recognized as defining patentable subject matter over the disclosure in Seta. Obviously, the patentability of the independent claims inheres in the dependent claims. The dependent claims are also patentable by virtue of limitations that they recite. For example, contrary to the assertions made by the Examiner, Applicant cannot find in Seta: (1) a disclosure



of a snow model that is immovable relative to a coordinate system, as recited in claims 2 and 3, or (2) a disclosure of an outputting of data, as specified in claims 5 and 6.

In view of the foregoing observations, Applicant respectfully submits that the disclosure in Seta cannot properly serve as a basis for rejecting any of claims 1-8 under 35 USC § 102(e).

#### OTHER PRIOR ART

Applicant has considered the other prior art cited by the Examiner. Applicant is not commenting on this prior art, because it was not applied against the claims in this application.

#### CONCLUSION

In view of the amendments, observations and arguments presented herein, Applicant respectfully requests that the Examiner reconsider and withdraw the rejections stated in the outstanding Office Action and recognize all of the pending claims as allowable.

Dated: July 3, 2006

Respectfully submitted,

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Attachment: Amended Abstract